

Claims:

1. A method for transmitting information between applications (A1, A2) executed in a first (TE1) and a second data transmission device (TE2) in a data transmission system, in which information transmission a data transmission protocol is used, wherein in the method one or more protocol conversions are conducted in the protocol stack (ST) for the information to be transmitted, said protocol stack comprising at least an application layer (L7) and a physical layer (L1), **characterized** in that at the transmission stage messages (FR1) are produced from the information and that the production of the messages (FR1) is conducted in the application layer (L7).
2. The method according to claim 1, **characterized** in that in the method at least two types of messages are transmitted in the messages, wherein the messages (FR1) contain information on the type of the message transmitted in the message (FR1).
3. The method according to claim 2, **characterized** in that the messages (FR1) are provided at least with a header field (H1), on the basis of which the type of the message is determined.
4. The method according to claim 3, **characterized** in that said header field (H1) is divided at least in two different parts, wherein the first part (C1) is used in all messages (FR1) and said second part (T1) is used, if necessary, in the transmission of the type-specific information of the message transmitted in the message.
5. The method according to claim 3 or 4, **characterized** in that the messages (FR1) are also provided with a data field (D1) to transmit information produced in the application (A1, A2).
6. The method according to any of the claims 1 to 5, **characterized** in that in the protocol stack (ST) at least a session layer (L5) is used between the application layer (L7) and the physical layer (L1), in which the protocol (WSP, HTTP) used therein contains data frames (FR2), containing at least a header field (H2) and a data field (D2), wherein

the messages produced in the application layer are transferred to the data field (D2) of the data frames (FR2) of the session layer.

5 7. The method according to any of the claims 1 to 6, **characterized** in that the WAP system is at least partly used as the data transmission system.

10 8. The method according to any of the claims 1 to 6, **characterized** in that the Internet data transmission network is at least partly used as the data transmission system.

15 9. A data transmission system which comprises means for transmitting information between applications (A1, A1) executed in a first (TE1) and second data transmission device (TE2) in a data transmission system in which the information is arranged to be transmitted by means of a data transmission protocol, wherein the data transmission system comprises means for conducting one or more protocol conversions for the information to be transmitted in the protocol stack (ST) which comprises at least an application layer (L7) and a physical layer (L1),
20 **characterized** in that the data transmission system also comprises at least means (MPU, MEM) for producing messages (FR1) from the information to be transmitted, and that the production of the messages (FR1) is arranged to be conducted in the application layer (L7).

25 10. The data transmission system according to claim 9, **characterized** at least two types of messages are arranged to be transmitted in the messages (FR1), wherein the messages are supplemented with information on the type of the message transmitted in the message (FR1).

30 11. The data transmission system according to claim 10, **characterized** in that the messages (FR1) are provided at least with a header field (H1), on the basis of which the type of the message is arranged to be determined.

35 12. The data transmission system according to claim 11, **characterized** in that said header field (H1) is divided at least in two different parts, wherein the first part (C1) is arranged to be used in all

messages (FR1) and said second part (T1) is arranged to be used, if necessary, in the transmission of the type-specific information of the message transmitted in the message.

- 5 13. The data transmission system according to claim 11 or 12, **characterized** in that the messages (FR1) are also provided with a data field (D1) to transmit information produced in the application (A1, A2).
- 10 14. The data transmission system according to any of the claims 9 to 13, **characterized** in that in the protocol stack (ST) at least a session layer (L5) is used between the application layer (L7) and the physical layer (L1), in which the protocol (WSP, HTTP) used therein contains data frames (FR2), containing at least a header field (H2) and a data field (D2), wherein the messages produced in the application layer are arranged to be transferred to the data field (D2) of the data frames (FR2) of the session layer.
- 15 15. The data transmission system according to any of the claims 9 to 14, **characterized** in that the data transmission system comprises at least the WAP system.
- 20 16. The data transmission system according to any of the claims 9 to 14, **characterized** in that the data transmission system comprises at least the Internet data transmission network.
- 25 17. A terminal (TE1, TE2) which comprises at least means (MPU, MEM) for executing applications (A1, A2) and means (RF, ANT) for transmitting information produced in the application to a data transmission system to transmit information to an application (A1, A2) executed in a second data transmission device (TE2), in which data transmission system information is arranged to be transmitted by means of a data transmission protocol, wherein the terminal (TE1, TE2) also comprises means (MPU, MEM) for conducting one or more protocol conversions for the information to be transmitted in a protocol stack (ST) comprising at least an application layer (L7) and a physical layer (L1), **characterized** in that the terminal (TE1, TE2) also comprises at least means (MPU, MEM) for producing messages (FR1)
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Table 1. Demographic characteristics of the study population	
Age (years)	65.0 ± 10.0
Gender	
Male	50.0
Female	50.0
Education (years)	12.0 ± 2.0
Marital status	
Married	60.0
Single	40.0
Occupation	
Retired	70.0
Unemployed	30.0
Income (USD/month)	1,200.0 ± 300.0
Health status	
Good	60.0
Poor	40.0
Smoking status	
Smoker	30.0
Non-smoker	70.0
Alcohol consumption	
Drinker	20.0
Non-drinker	80.0
Comorbidities	
Hypertension	40.0
Diabetes	30.0
Heart disease	20.0
Stroke	10.0
Other	10.0